

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

U.S.

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/975,267	11/20/97	NITSCHKE	D GLT1598PLUS (P)

IM22/0111

EXAMINER

RULLER, J

ART UNIT	PAPER NUMBER
1731	11

DATE MAILED:

01/11/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No. <b>08/975,267</b>	Applicant(s) <b>Nitschke et al.</b>
Examiner <b>Jacqueline Ruller</b>	Group Art Unit <b>1731</b>

Responsive to communication(s) filed on the amendment filed 3/22/99

This action is **FINAL**.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claims**

Claim(s) 1-16 is/are pending in the application.

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

Claim(s) \_\_\_\_\_ is/are allowed.

Claim(s) 1, 5, 13, 15, and 16 is/are rejected.

Claim(s) 2-4, 6-12, and 14 is/are objected to.

Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.

The specification is objected to by the Examiner.

The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_.

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Interview Summary, PTO-413

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1731

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster (5,092,916) in view of Kubo et al. (5,445,508). McMaster teaches all that is recited except a lower mold support assembly to which the lower mold is transferred from the mold shuttle. Specifically, McMaster teaches a glass sheet heating furnace (14), an upper mold support (26), a lower mold shuttle (20), and alignment means (22 and 30) for the upper mold relative to the lower mold (See col. 3, lines 32, 54 and 61 and col. 4, line 15). Kubo et al. teach a vulcanizing mold setting apparatus comprising a mold carriage (49) for supporting the mold mount and transferring it to the lower heating plate (6) and a pair of mold supports (24) each with two clamping members (26)(a total of four clamping members; claim 5). Kubo et al. also teach a centering mechanism for centering the mold on the lower heating plate (col. 3, lines 46-68). In col. 7, line 35, Kubo et al. Teach that the mold carriages in all of the taught embodiments may be unmanned automotive mold carriages. It is presumed that if the carriages are unmanned, then there must be some means to automatically control their movement which would suggest that they could be programmed to move by themselves. If this is the case, then a cyclic program could be

Art Unit: 1731

established. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the mold carriage and mold supports of Kubo et al. for the shuttle of McMaster so that once the shuttle delivers the mold to the forming area, it is free to move out of the way of operation thus increasing the life of the shuttle or leaving it free to perform another task. It also would have been obvious to one of ordinary skill in the art at the time of the invention to cyclically control the movement of the carriage and thus the mold, to produce a consistent process with consistent glass sheet production.

3. Claims 13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster in view of Kubo et al. as applied to claim 1 above, and further in view of McMaster et al. (4,470,838). McMaster in view of Kubo et al. teach all that is recited in claim 16 except the quenching station. McMaster et al. (4,470,838) teach a quenching station with upper and lower blastheads (18 and 20) with quench gas feeding through them. A bent glass sheet is moved on a open center ring type mold by a shuttle from the molding station to the quench station between the blastheads (col. 4, lines 36-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to add the quenching station of McMaster et al. (4,470,838) to the apparatus of McMaster to provide quenching capability along with the molding apparatus to improve the efficiency of the process of making glass sheets.

Art Unit: 1731

4. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMaster in view of Kubo et al. in view of McMaster et al. as applied to claims 13 above, and further in view of Austin. McMaster, Kubo et al., and McMaster et al. teach all that is recited in claim 15 except a railway having a pair of spaced rails. Austin teaches an apparatus for forming workpieces that includes carts for carrying the dies(molds) and parallel tracks along which the carts ride (col. 5, lines 31-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use a railway system of Austin to efficiently move the shuttle of McMaster.

***Response to Arguments***

5. Applicant's arguments filed 3/22/99 have been fully considered but they are not persuasive. Applicants' arguments regarding the addition of the words "cyclic" and "cyclically" do not make the claims allowable over the prior art of record because it would be obvious to automate a system so that the components operated in a cyclic fashion in order to develop a system that did not have to be manually operated or watched all of the time, thus increasing productivity and decreasing cost. It is also assumed that in automated systems, like the one taught by Kubo et al., it would take the same amount of time for each step in the operational process or in other words, at the end of the process or at the end of each step of the process, a cycle is completed. If the system is automated, each step

Art Unit: 1731

in the process would take the same amount of time unless some sort of problem or malfunction occurred. Regarding the argument that the Kubo et al. patent is nonanalogous, there is nothing in claims 1 or 16 that **structurally** limits the apparatus claimed to a glass sheet bending machine.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jacqueline Ruller whose telephone number is (703) 308-0316. The examiner can normally be reached on Monday, Tuesday and Thursday from

Art Unit: 1731

6:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on (703) 308-3837. The fax phone number for this Group is (703) 305-7115.

JAR  
*[Signature]*  
April 29, 1999

*[Signature]*  
Stanley S. Silverman  
Supervisory Patent Examiner  
Technology Center 1700